IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
ATLANTA DIVISION

CANON INC.,	)	
	)	
Plaintiff,	)	
	)	CIVIL ACTION NO.:
v.	)	1:11-cv-03855-AT-JSA
	)	
COLOR IMAGING, INC. and GENERAL PLASTIC INDUSTRIAL CO., LTD.,	)	
	)	
Defendants.	)	

DEFENDANTS OBJECTIONS AND MOTION TO MODIFY SPECIAL MASTER'S REPORT AND RECOMMENDATIONS: PLAINTIFF CANON'S MOTION FOR SUMMARY JUDGMENT OF NO INVALIDITY OF U.S. PATENT NO. 7,646,012

Pursuant to Fed. R. Civ. P. 53(f) and this Court's Order of September 28, 2015, Defendants Color Imaging, Inc. ("Color Imaging") and General Plastic Industrial Co., Ltd. ("GPI") ("Color Imaging and GPI are collectively referred to herein as "Defendants") file this their objections and motion to modify the Special Master's Report and Recommendations: Plaintiff Canon's Motion for Summary Judgment of No Invalidity of U.S. Patent No. 7, 646, 012 (the "Validity R&R"), showing this Court as follows.

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Cases

Other Authorities

Rules

Treatises

EXECUTIVE SUMMARY

The Validity R&R misunderstands Defendants' contentions and misapplies the applicable law. In particular, the validity R&R fails to recognize the nuanced problem facing the inventors of U.S. Pat. No. 7,646,012 (the "'012 Patent") and how, when properly considered, the solution to that problem was obvious.

Canon's '012 Patent describes and claims a toner bottle usable in a copier machine or electrographic imaging system ("EIS"). [Dkt. #168 at 2; Dkt. #169 (adopting the R&R as the opinion of the Court)]. The toner bottle is sealed with a sealing member. [Dkt. #168, at 5]. A user inserts the toner bottle into the copier machine and the machine engages the sealing member with a snap-fit connector, pulling it to unseal the toner bottle. [Dkt. #168, at 8-9]. As toner is needed, the copier machine rotates the toner bottle, driving the toner out of the unsealed opening of the toner bottle and into the copier machine. [Dkt. #168, at 10]. Once the toner bottle is empty, the copier machine re-seals it and the user can remove it from the machine. [Dkt. #168, at 10-11].

The Validity R&R recognizes that the problem facing the inventors of the '012 Patent was coming up with a simple and cost-effective way to mount a toner supply container in a copy machine that (1) would be easy to install and remove from a copy machine from the standpoint of the user, (2) would reliably seal toner

within the container when outside the copy machine, and (3) would discharge the right amount of toner at the right time when installed in the copy machine. [Dkt. #370, p. 89]. However, the Validity R&R then opines that it is "completely irrelevant" to the obviousness analysis that the prior art had already solved this exact problem. [Dkt. #370, p. 89]. The fact that the prior art had already solved the exact problem facing the '012 Patent inventors establishes that the '012 Patent offers at best an incremental improvement over the prior art.

Further, the '012 Patent itself expressly identifies and purports to solve only a very specific problem in the prior art: a simple and effective means of connection between a toner bottle and EIS that insured their proper alignment. However, a solution to the simple and cost-effective means of connection was already well-known to persons of ordinary skill in the art: snap-fit connectors. For instance, the prior art U.S. Patent No. 5,903,806 ("Matsuoka '806) discloses snap-fit connectors utilized in toner bottles. The prior art U.S. Patent No. 6,698,966 ("Hilton '966") discloses a snap-fit connector especially developed for simplicity of manufacture and ease of engagement. [Dkt. #320-15]. Accordingly, a person of skill in the art would be familiar with and have considered a snap-fit connector in developing a more cost-effective and simpler means of connecting a toner bottle and EIS—i.e., the snap-fit connector prior art is analogous and the Validity R&R errs in finding

to the contrary.

Similarly, the Validity R&R errs in finding—without any independent analysis—that Defendants' obviousness arguments fail. In particular, the Validity R&R simply refers the Court to Canon's briefing and states that (i) the reasons for combining certain prior art references "are insufficient as a matter of law," (ii) Defendants' prior art combinations are missing a limitation of Claim 24, and (iii) that one prior art reference teaches away from the invention of the '012 Patent. However, the Validity R&R ignores controlling precedent in finding that the motivations to combine references are insufficient—the prior art analysis of the '012 Patent, itself, establishes such motivation. Similarly, the Validity R&R fails to recognize that the "missing" limitation is actually found in several of the references. And, finally, the Validity R&R misunderstands the prior art references relied upon by Defendants in finding that one of those references teaches away from the invention of the '012 Patent.

As shown below, there exist—at a minimum—a number of substantial issues of material fact regarding Defendants' obviousness defense that require submission of the issues to the fact finder.

POINTS AND AUTHORITIES

I. Legal Standard

A. The Validity R&R Is Reviewed De Novo

The Court reviews the Special Master's recommendations as to both findings of fact and legal conclusions *de novo*. FED. R. CIV. P. 53(f)(3)-(4). The Court may adopt or modify, wholly or partly reject or reverse, or receive further evidence and resubmit to the Special Master with instructions. FED. R. CIV. P. 53(f)(1). Furthermore, the Court is required to afford the parties an opportunity to be heard when deciding whether to act on a Special Master's report and recommendation. FED. R. CIV. P. 53(b)(1).

B. Summary Judgment Standard of Review

Summary judgment is only proper "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986); FED. R. CIV. P. 56. An issue is "genuine" if the record taken as a whole could lead a rational trier of fact to find for the nonmoving party. *Allen v. Tyson Foods*, 121 F.3d 642, 646 (11th Cir. 1997). A fact is "material" if it hinges on the substantive law at issue and it might affect the outcome of the nonmoving

party's claim. *Anderson v. Liberty Lobby*, 477 U.S. 242, 248 (1986).

C. Formal Objections To The Special Master's Report Are Not Expressly Required By The Rule

Federal courts construing FED. R. CIV. P. 53(e) generally hold it unnecessary to make objections to a special master's report. *Henry Hanger and Display Fixture Corp. of Am. v. Sel-O-Rak Corp.*, 270 F.2d 635 (5th Cir. 1959); *Shima v. Brown*, 133 F.2d 48, 49 (D.C. Cir. 1943), *cert. denied*, 318 U.S. 787 (1943). Formal objections to the Special Master's Report are not expressly required by Rule 53. See 9 CHARLES ALAN WRIGHT & ARTHUR R. MILLER, FEDERAL PRACTICE AND PROCEDURE, §2612. *See, e.g.*, *Seiko Epson Corp. v. Nu-Kote Int'l Inc.*, 190 F.3d 1360 (Fed. Cir. 1999) (despite lack of written objection, appellate court considered defendant's contention that master's report was not relevant); *Livas v. Teledyne Movible Offshore, Inc.*, 607 F.2d 118 (5th Cir. 1979) (failure to object to findings of magistrate no bar to raising independent obligation of district court to determine that master's findings were not clearly erroneous); *Bingham Pump Co. v. Edwards*, 118 F.2d 338, 340 (9th Cir. 1941) ("pursuant to Federal Rules of Civil Procedure, Rule 52(b), 28 U.S.C.A. following section 723c, 'the question of the sufficiency of the evidence to support the findings may thereafter be raised whether or not the party raising the question has made in the

district court an objection to such findings'.") (now FED. R. CIV. P. 52(a)(5)); *U.S. v. 1,674.34 Acres of Land, More or Less, in Benton County, Arkansas*, 220 F. Supp. 893, 894 (W.D. Ark. 1963) ("the court has the power, if it be deemed necessary and of vital importance in the interest of substantial justice, to modify a Master's report in any particular [way] in which such modification might be required without any exceptions having been filed thereto"); *In re Portland Elec. Power Co.*, 97 F. Supp. 918 (D. Ore. 1948) (same). As such, Defendants reserve their right to appeal the Special Master's Validity R&R on all grounds, including those to which objection is made only by reference.

D. The Framework For An Obviousness Analysis

A patent is invalid "when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 406 (2007) (quoting 35 U.S.C. § 103(a)). The relevant factors for obviousness include "the scope and content of the prior art"; any "differences between the prior art and the claims at issue"; "the level of ordinary

skill in the pertinent art"; and relevant secondary considerations.[1] *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17 (1966).

1. Under *KSR*, Obviousness Combinations are Based on Common Sense

In 2007, the Supreme Court handed down the landmark decision in *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007). The *KSR* decision made obviousness a much simpler analysis—one that did not require the courts to look closely into motivation of the inventor. "What matters is the objective reach of the claim. If the claim extends to what is obvious, it is invalid under §103." *Id.* at 418. "[H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *Id.*; *see also In re Preda*, 401 F.2d 825, 826 (CCPA 1968) ("[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom").

In short, the Supreme Court instructed that the obviousness doctrine is "expansive and flexible," and courts are free to "take account of the inferences and

[1] Canon has conceded that there are no relevant secondary considerations of non-obviousness.

creative steps that a person of ordinary skill in the art would employ." *KSR.* at 415, 418..

Under *KSR*, a court is not required to inquire into the state of mind of the inventor to see if that particular inventor would have been motivated to combine references. Rather, the courts are to look to see whether there is any aspect of the claimed invention that would lead a person of ordinary skill to search the cited prior art. Under the correct analysis, any need or problem ***known in the field of endeavor at the time of invention and addressed by the patent*** can provide a reason for combining the elements in the manner claimed. *Id.* at 420 (emphasis added).

Similarly, it is error to limit references only to those elements of the prior art that attempt to solve the same problem. "Common sense teaches, however, that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle." *Id.* at 420.

In *Wyers v. Master Lock Co.*, 616 F.3d 1231 (Fed. Cir. 2010), the Federal Circuit explained that the new *KSR* standard "directs us to construe the scope of analogous art broadly." *Id.* at 1238. Under that broad standard, courts must take a more expansive and flexible approach that "emphasize[s] common sense" *Id*.

The *Wyers* court also explained that successful obviousness challenges are not dependent on expert testimony. *Id.*, citing *Perfect Web Technologies, Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1329 (Fed. Cir. 2009) and *Ball Aerosol and Spec. Container v. Limited Brands*, 555 F.3d 984, 993 (Fed. Cir. 2009) ("*KSR* and our later cases establish that the legal determination of obviousness may include recourse to logic, judgment, and common sense, in lieu of expert testimony.") The Federal Circuit has further explained the common sense standard in other post-*KSR* cases. "More recently, we explained that that use of common sense does not require a 'specific hint or suggestion in a particular reference,' only a reasoned explanation that avoids conclusory generalizations." *Perfect Web*, 587 F.3d at 1329.

This is especially true when, as is the case with the '012 Patent, "the asserted claims involve a combination of familiar elements according to known methods that does no more than yield predictable results." *Agrizap, Inc. v. Woodstream Corp.*, 520 F.3d 1337, 1344 (Fed. Cir. 2008).

2. Analogous Art Under §103

Two criteria are relevant in determining whether prior art is analogous: "(1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor,

whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved." *Wyers*, 616 F.3d at 1237. As noted above, *Wyers* instructs that, under *KSR*, courts are "to construe the scope of analogous art broadly." *Id.* at 1238. "A reference is reasonably pertinent if . . . it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." *Innovention Toys, LLC v. MGA Entertainment, Inc.*, 637 F.3d 1314, 1321 (Fed. Cir. 2011), citing *In re Clay*, 966 F.2d 656, 658 (Fed. Cir. 1992).

3. Application Of KSR And Other Relevant Authority To The '012 Patent And The *Winslow* Tableau

As discussed in more detail below, there are only two pieces to the puzzle of applying Defendants' prior art references to the '012 Patent: "base" references *i.e.*, a prior art toner bottle, such as Yoshiki '079 or Matsuoka '806, and "secondary" references for a generic snap-fit connector, such as Hilton '966 or Sundberg '990.

As is well known, the "base reference" in obviousness is the starting point or closest prior art reference. That is, the base reference represents the prior art to which the invention pertains before modification, and one or more additional "secondary" references are used to teach the modifications to arrive at the claimed invention. The Federal Circuit has expressly held that the Supreme Court's

obviousness test in *KSR* requires such a starting point in the relevant art itself:

> The Supreme Court's analysis in *KSR* thus relies on several assumptions about the prior art landscape. First, *KSR* assumes a starting reference point or points in the art, prior to the time of invention, from which a skilled artisan might identify a problem and pursue potential solutions. Second, *KSR* presupposes that the record up to the time of invention would give some reasons, available within the knowledge of one of skill in the art, to make particular modifications to achieve the claimed compound…. Third, the Supreme Court's analysis in *KSR* presumes that the record before the time of invention would supply some reasons for narrowing the prior art universe to a "finite number of identified, predictable solutions,"

Eisai Co. Ltd. v. Dr. Reddy's Laboratories, Ltd., 533 F.3d 1353, 1359 (Fed. Cir. 2008).

In *KSR*, the Supreme Court followed this exact approach, identifying Asano as a "base" reference teaching a vehicle pedal assembly that might be modified, and relying on "secondary" references to make such a modification to arrive at the claimed invention. "For a designer starting with Asano, the question was where to attach the sensor. The consequent legal question, then, is whether a pedal designer of ordinary skill starting with Asano would have found it obvious to put the sensor on a fixed pivot point." *KSR*, at 424. The starting point for an inventor seeking to improve a pedal assembly was Asano—a pedal assembly itself. Hence, the "proper question" focused on by the Supreme Court was how to upgrade or improve the base reference Asano. *Id*. *Accord Eisai*, at 1359 ("*KSR* assumes a

starting reference point or points in the art, prior to the time of invention, from which a skilled artisan might identify a problem and pursue potential solutions").

Further, this is the approach used in the well-known *Winslow* case, where Judge Rich explained an appropriate obviousness analysis in an illustrative manner by envisioning the hypothetical ordinary inventor in his workshop (often referred to as the *Winslow* tableau):

> We think the proper way to apply the 103 obviousness test to a case like this is to first picture the inventor as working in his shop with the prior art references-which he is presumed to know hanging on the walls around him. One then notes that what applicant Winslow built here he admits is basically a Gerbe bag holder having airblast bag opening to which he has added two bag retaining pins. If there were any bag holding problem in the Gerbe machine when plastic bags were used, their flaps being gripped only by spring pressure between the top and bottom plates, Winslow would have said to himself, "Now what can I do to hold them more securely?" Looking around the walls, he would see Hellman's envelopes with holes in their flaps hung on a rod. He would then say to himself, "Ha! I can punch holes in my bags and put a little rod (pin) through the holes. That will hold them! After filling the bags, I'll pull them off the pins as does Hellman. Scoring the flap should make tearing easier."

In re Winslow, 151 U.S.P.Q. 48, 51 (C.C.P.A. 1966).

Just as *KSR* and *Eisai*, the *Winslow* approach starts with the base reference—the relevant product as it existed before the modification. The next step is to identify the solutions in the same or analogous arts that the skilled artisan working at the *Winslow* workbench would have considered and determine whether it would be obvious to use them to modify the base reference.

II. The Disclosure of the '012 Patent

The '012 Patent describes and claims a toner supply container that is usable in, for example, a copy machine. At a basic level, a copier works by adhering a fine powdery substance, called toner, to a sheet of paper in a pattern that matches the text or image being copied. Because toner is used each time a copy is made, from time to time a copier's toner supply must be replenished. Because toner is messy, manufacturers often supply toner in the form of a sealed container that can be installed in the copier whenever a fresh supply of toner is needed. [Dkt. #320-4, at 1:26-48, 6:44-51]. When the toner supply is depleted, the user removes the empty toner container and replaces it with a full one. [Dkt. #320-4, at 8:58 – 9:33].

Figure 3 of the '012 Patent, which is reproduced below, illustrates an exemplary toner bottle 1 and a copier 100.

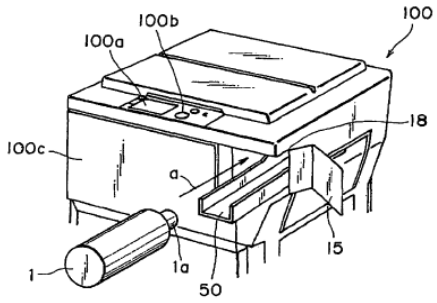


FIG. 3

The toner bottle 1 is installed in the copier 100 by inserting it in the direction indicated by arrow a in Figure 3.

Figure 8 of the '012 Patent, which is reproduced below, is a partly broken

perspective view of toner bottle 1.

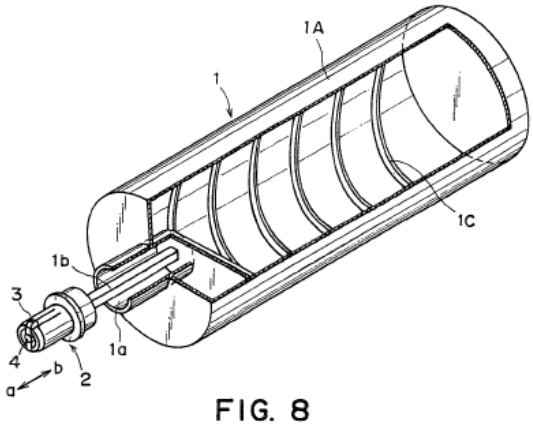


FIG. 8

The toner bottle 1 is generally cylindrical, and one end thereof has an opening 1a through which toner may flow. [Dkt. #320-4, at 9:37-39]. The opening 1a is plugged with a sealing member 2 for sealing the opening 1a. The opening 1a is unsealed and resealed by the sliding motion of the sealing member 2 relative to the toner bottle 1 in the longitudinal direction (arrow a↔b) of the toner bottle 1. [Dkt. #320-4, at 9:41-47].

The opening 1a is sealed when the toner bottle 1 is outside of the copier 100. When the toner bottle 1 is installed in the copier 100, two things happen: (1) the opening 1a is unsealed; and (2) when the copier is being used, the toner bottle 1 is rotated. The rotation of the toner bottle 1 causes the toner inside of it to be fed out of the opening 1a and into a toner hopper within the copier 100, so that the toner in the hopper can be used to make copies.

The ‘012 Patent discloses several embodiments of the sealing member 2

suitable for sealing and unsealing the opening 1a in the toner bottle 1. The asserted claims relate to the embodiment of sealing member 2 illustrated in Figures 23(A) and 23(B) of the '012 Patent, which are reproduced below.

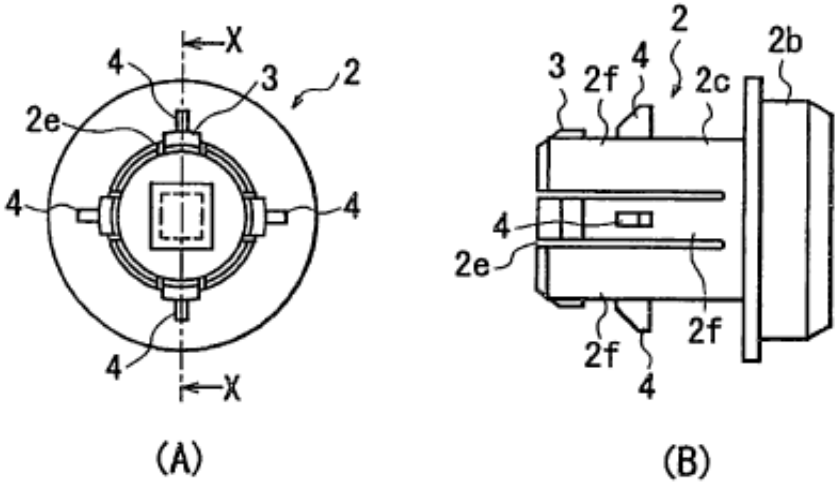


FIG. 23

The sealing member 2 has two main portions: a sealing portion 2b, and a coupling portion 2c. [Dkt. #320-4, at 11:21-25]. The sealing portion 2b fits snugly within the opening 1a in order to seal the toner within the toner bottle 1. [Dkt. #320-4, at 11:28-30]. The coupling portion 2c is engageable with a part in the copier 100 in order to (1) move the sealing member 2 and the toner bottle 1 relatively away from each other to unseal the opening 1a, and (2) receive rotational drive force from the copier 100. [Dkt. #320-4, at 11:31 – 12:18]. To these ends, the coupling portion 2c includes supporting portions 2f, engaging projections 3, and releasing force receiving portions 4.

"The coupling engagement portion 2c of the sealing member 2 has an engaging projection 3 for receiving the driving force from" the copier 100. [Dkt. #320-4, at 11:63-65. "The engaging projection 3 is projected radially outwardly from the peripheral surface of the cylindrical portion of the coupling engagement portion 2C." [Dkt. #320-4, at 11:65-12:1]. Each engaging projection 3 has two sub-portions—a rotational force receiving portion 3a and a locking portion 3b, which, although not labeled in Figures 23(A) and 23(B), are labeled in Figures 12 and 13, which are reproduced below.

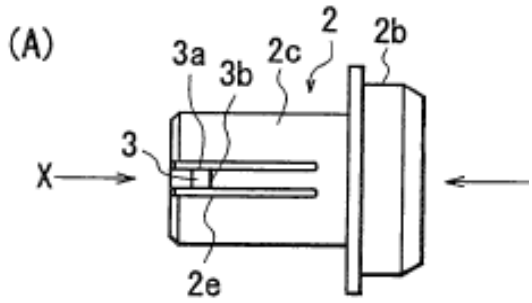


FIG. 12

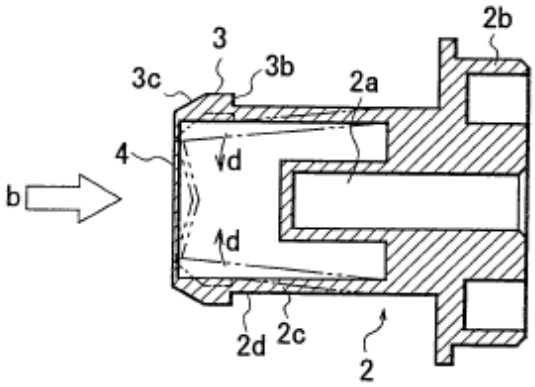


FIG. 13

"The engaging projection comprises a drive receiving surface 3a (drive force receiving portion) for receiving the rotational from [the copier 100]; and a locking surface 3b (locking portion) for snap-fit type locking of the sealing member 2 into a locking hole (portion to be locked) provided in [the copier 100] when the sealing member 2 and the toner bottle 1 are moved away from each other (from the closed

state to the open state).” [Dkt. #320-4, at 12:1-9].

The sealing member 2 may include a releasing force receiving portion 4 for disengaging the coupling engagement portion 2c from the copier 100. [Dkt. #320-4, at 9:48-52]. Referring back to Figures 23(A) and 23(B) reproduced above, the releasing force receiving portion 4 lies between the engaging projection 3 and the sealing portion 2b. That is, the releasing force receiving portion 4 is located closer to the toner bottle 1 than is the engaging portion 3. The releasing force receiving portion 4 extends radially outwardly to a greater extent than the radially outermost part of the engaging projection 3. [Dkt. #320-4, at 18:33-36].

“The engaging projection 3 has a driving force receiving function as well as the locking function and, therefore, it has a certain degree of rigidity. In view of this, slits 2e or the like are formed at lateral ends of the engaging projection 3, so that only the part of the coupling engagement portion 2c where the engaging projection 3 is provided can relatively freely deform elastically toward the inside.” [Dkt. #320-4, at 12:44-50]. More particularly, “[s]lits 2e are formed at the lateral sides of the supporting portion 2f for the engaging projection 3 and the releasing portion 4 to facilitate inward elastic deformation of the engaging projection 3 and the releasing portion 4 and restoration.” [Dkt. #320-4, at 18:52-56]. The engaging projection 3 and the releasing force receiving portion may be integral with the

supporting portion 2f. [Dkt. #320-4, at 14:26-28].

In the embodiment illustrated in Figures 23(A) and 23(B), there are four supporting portions 2f, four engaging projections 3, and four releasing force receiving portions 4, [Dkt. #320-4, at 18:36-59], but the precise number of each of these structural elements can vary. For example, in the embodiment illustrated in Figures 35A, 35B, and 35C of the '012 Patent, reproduced below, there are only two supporting portions, two engaging portions, and two displacing force receiving portions.

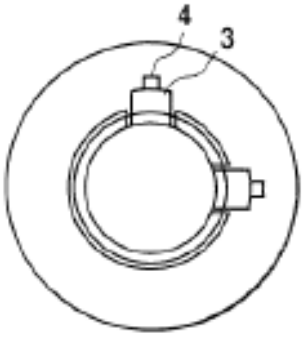


FIG. 35A

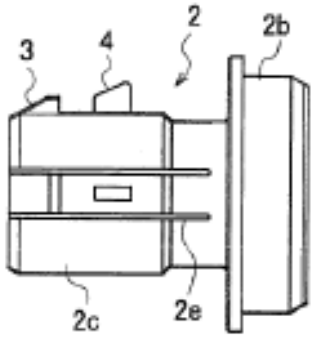


FIG. 35B

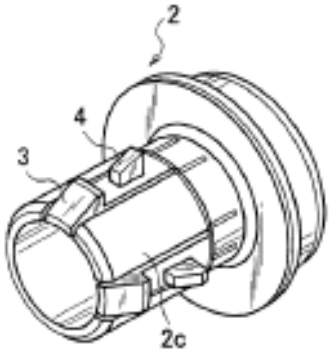


FIG. 35C

As discussed above, the coupling portion 2c is engageable with a part in the copier 100 referred to as a driving portion 20. [Dkt. #320-4, at 7:31-34; 9:58-60]. An example of the hollow cylindrical driving portion 20 is depicted in the left-hand portion of Figure 14 of the '012 Patent, which is reproduced below.

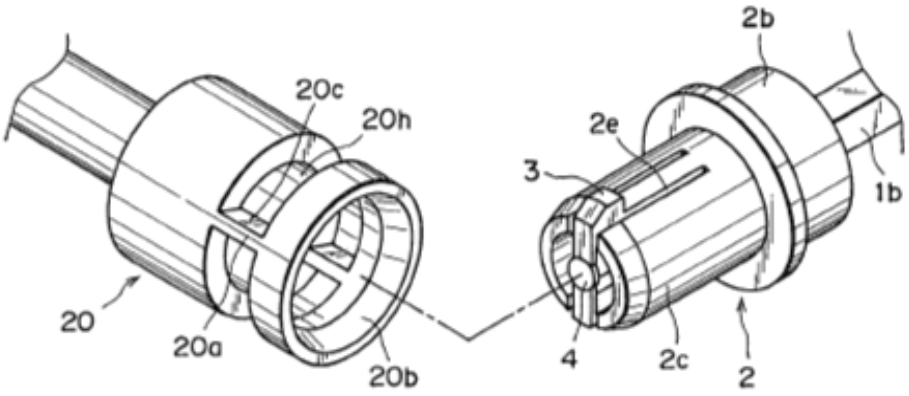


FIG. 14

This driving portion 20 contains a locking slot 20h that extends in a circumferential direction. [Dkt. #320-4, at 14:29-32]. The locking slot 20h is interrupted by a pair of ribs 20a, which in this example are spaced approximately 180 degrees apart. A motor (not shown) within the copier 100 rotates the driving portion 20. [Dkt. #320-4, at 7:35-38]. The driving portion 20, in turn, rotates the toner bottle 1 through the abutment of one or both of the rotating engaging ribs 20a with the drive receiving surface 3a of one or more engaging projections 3 of the sealing member 2. [Dkt. #320-4, at 14:41-45].

Figures 15(B) and 15(C) of the '012 Patent, which are reproduced below, show the insertion of the sealing member 2 into the driving portion 20.

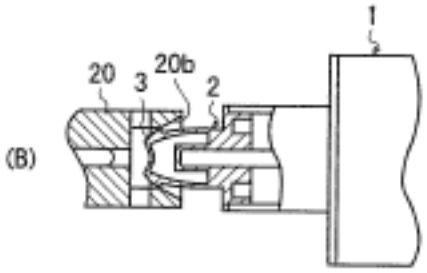


FIG. 15(B)

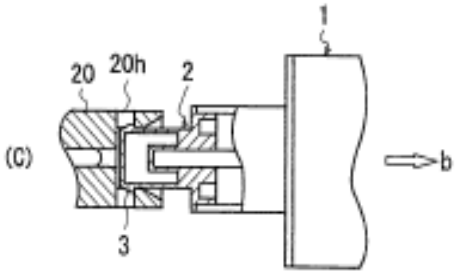


FIG. 15(C)

When the toner bottle 1 is first inserted, "the tapered portion 3c of the engaging projection 3 of the sealing member 2 is brought into contact with the tapered surface 20b of the driving portion 20, as shown in FIG. 15(B), and the engaging projection 3 is being guided by the tapered surface 20b while being elastically deformed toward the inside." [Dkt. #320-4, at 14:54-59]. "With the further insertion of the toner bottle 1, the engaging projection 3 passes by the straight portion 20g extending from the tapered surface 20b, the engaging projection 3 is restored because of the provision of the space portion 20h (locking hole) not having the engaging rib 20a, by which the engaging projection 3 is locked with the driving portion 20, as shown in FIG. 15(C). In this state, the engaging projection 3 is firmly locked relative to the driving portion 20, and the position of the sealing member 2 in the thrust direction (axial direction) is substantially fixed relative to" the copier 100. [Dkt. #320-4, at 14:60-15:3].

Figure 24 of the '012 Patent, which is reproduced below, provides a cross-sectional view of the state in which the coupling portion 2b of the sealing

member 2 has entered the driving portion 20 and the engaging projections 3 have engaged with the locking slot 20h of the driving portion 20.

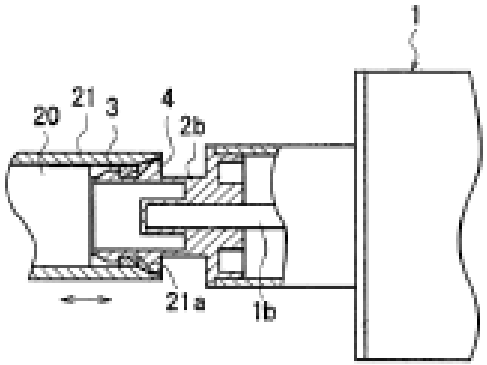


FIG. 24

In addition to showing the toner bottle 1, the sealing member 2, and the driving portion 20, Figure 24 also shows a hollow cylinder 21. The hollow cylinder 21, not to be confused with the hollow cylindrical driving member 20, is a part of the copier 100 that is concentric with and movable relative to the driving portion 20. [Dkt. #320-4, at 18:43-47]. As discussed *infra*, the hollow cylinder 21 plays a role in disengaging the engaging projections 3 from the locking slot 20h in the driving portion 20 when the toner bottle 1 is removed from the copier 100.

Once the engaging projections have engaged with the locking slot 20h of the driving portion 20, the driving portion 20 and the toner bottle 1 are moved relatively away from each other. This relative movement may be caused, for example, by a manual lever or by the closing of a cover on the copier. As the driving portion 20 and the toner bottle 1 move relatively away from each other, so

too do the sealing member 2 and the toner bottle 1. This is because the locking portions of the engaging portions are abutted against an interior surface of the slot of the driving member. Therefore, as the driving member and the container body pull away from each other, the engaging portions remain engaged with the slot of the driving member and the sealing member is pulled out of the opening in the container body. [Dkt. #320-4, at 8:9-17;13:8-16; 15:4-13].

Figure 25A of the '012 Patent, which is reproduced below, illustrates the unsealed state in which the driving member 20, and with it, the sealing member 2, have been moved relatively away from the toner bottle 1. [Dkt. #320-4, at 18:61-63].

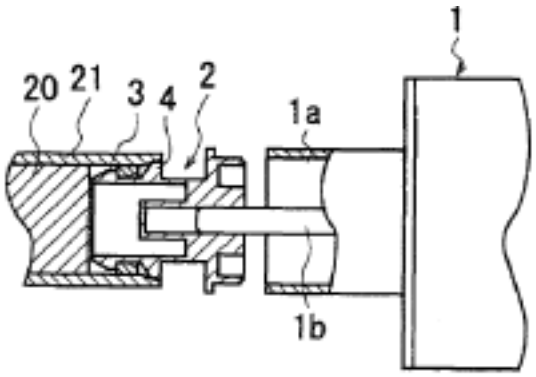


FIG. 25A

In this state, with the opening 1a unsealed, the driving portion 20 rotates the toner bottle 1 through the abutment of one or both ribs 20a with the rotational force receiving portion 3a of one or more engaging projections 3 of the sealing member 2. This rotation of the toner bottle 1 causes the toner to be fed out of the opening

1a in the toner bottle 1 and into the toner hopper within the copier 100.

To remove the toner bottle 1 from the copier 100, the engaging projections 3 are disengaged from the locking slot 20h in the driving portion 20 and the sealing portion 2b of the sealing member 2 is resealed within the opening 1a of the toner bottle 1. This removal process is illustrated in Figures 25(B) and 25(C), which are reproduced below, showing the hollow cylinder 21 advancing toward the toner bottle 1 in direction a.

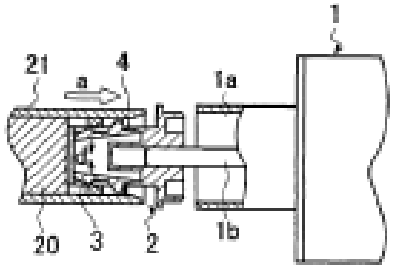


FIG. 25B

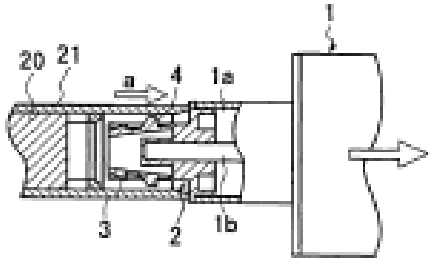


FIG. 25C

As the hollow cylinder 21 advances toward the toner bottle 1, two things happen: (1) the hollow cylinder 21 forces the releasing force receiving portions 4 inwardly, causing the supporting portions 2f to elastically displace in an inward direction and the engaging projections 3 to disengage from the locking slot 20h (shown in FIG. 25B); and (2) the hollow cylinder 21 pushes the sealing member 2 toward the toner bottle 1 and snugly fits the sealing portion 2b back into the opening 1a (shown in FIG. 25C). At this point, the sealing member 2 is disengaged from the driving portion 20, the opening 1a is resealed, and the toner

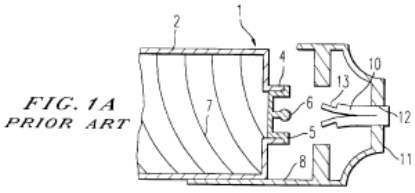
bottle 1 can be removed from the copier 100 without spillage of any toner that may remain in the container. [Dkt. #320-4, at 18:74-19:14].

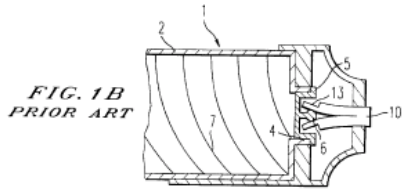
III. Overview of the Relevant Prior Art

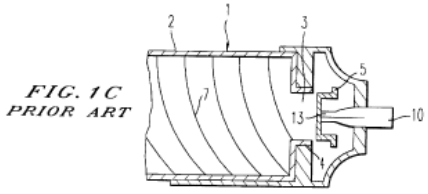
The relevant prior art is comprised of prior art relating to toner bottles, the primary references in the *Winslow* tableau, and prior art relating to the structures that provide a simple and cost-effective method of detachably mounting the toner bottle in the EIS, *i.e.*, locking and releasing the toner bottle in position.

A. The Toner Bottle Prior Art

Yoshiki '079 is prior art to the '012 Patent. [Dkt. #360-2, p. 6]. As shown in Figure 1 of Yoshiki '079 (right), a toner bottle 1 with cap 5 is inserted without any particular alignment required. [Dkt. #320-13]. The collet chuck 10 grips tab portion 6 then pulls the cap 5 off the toner bottle 1, creating opening 3. [Dkt. #320-13, at 2:17-42; Dkt. #11, at ¶19]. Once the toner is empty, the collet chuck 10 pushes the cap 5 back over the opening 3 to reseal the toner bottle. [Dkt. #320-13, at 2:48-52; Dkt. #320-11, at ¶19].







Matsuoka ‘806 is prior art to the ‘012 Patent. [Dkt. #360-2, p. 6]. As shown in Fig 10(b), Matsuoka ‘806 has a rotary power transmitting member 44 on the copier machine that both unseals and rotates the toner bottle. [Dkt. #360-2, p. 7]. Matsuoka ‘806 discloses an “expandable bellows” 33 that seals opening 321 of cap 32. [Dkt. #360-2, p. 8]. As shown in Fig. 11, rotary power transmitting member 44 compresses the bellows 33, causing opening 321 to form, which unseals the bottle as the toner bottle is inserted into the copier machine. [Dkt. #360-2, p. 8]. As shown in FIG 8(b), the hollow cylindrical portion 447 of the rotary power transmitting member 44 includes engagement projections 448, which engage with similar projections 327 on the toner bottle. [Dkt. #360-2, p. 8]. These projections cause the toner bottle to rotate when the rotary power transmitting member 44 rotates. [Dkt. #360-2, p. 8].

FIG. 10 (b)

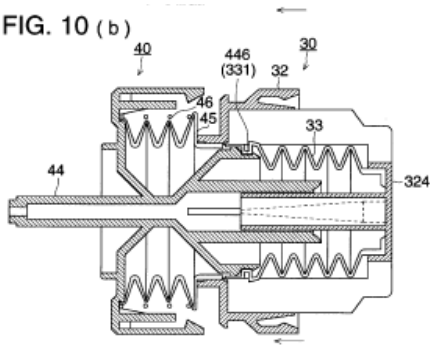


FIG. 11

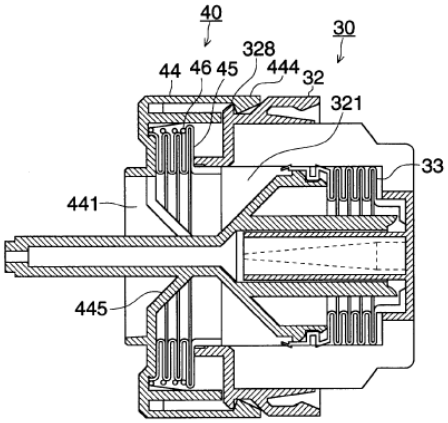
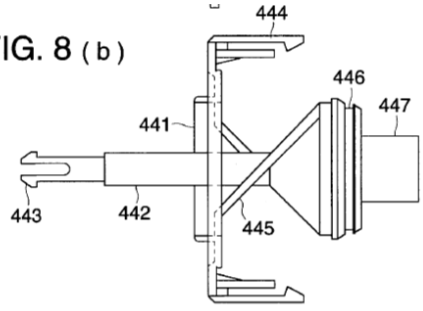
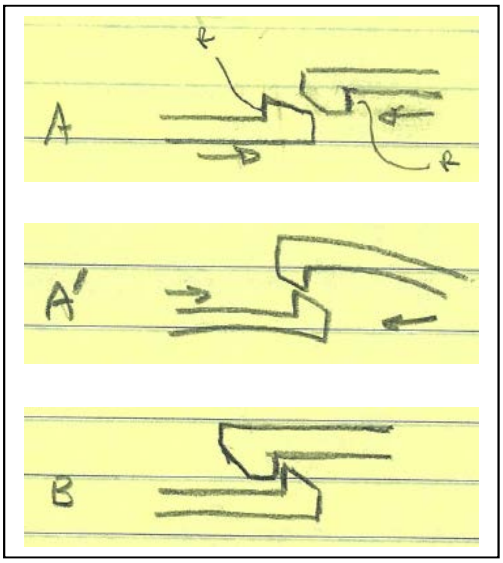


FIG. 8 (b)



B. The Secondary References—Snap-Fit Connectors

Snap-fit connectors were well-known as of the priority date of the '012 Patent. [Dkt. #320-11, at ¶128; Dkt. #347-3, p. 64]. Dr. Sturges, during his deposition, drew an illustration of an example snap-fit connection (below). [Dkt. #347-4]. To engage, the cantilever beams displace such that the hook elements R can pass each other (step A'), then the cantilever beams restore to their original shape (B), resulting in a lock between the two hook elements. [Dkt. #347-3, p. 55-56; Dkt. #347-4].



Dr. Springett highlighted many examples of snap-fit connectors used in the toner bottle prior art, including Matsuoka '806. [Dkt. #320-11, at ¶¶69-80]. The examples show both experts agree "that a person of skill in the art . . . would have been familiar with snap-fit connectors." [Dkt. #320-11, at ¶80]. Dr. Springett also concluded, based on his work experience in research and development of copier systems for Xerox Corporation, that a person of skill in the art would have been familiar with snap-fit connectors, and would have considered snap-fit connectors in facing the problems disclosed by the '012 Patent. [Dkt. #320-11, at ¶¶83, 128; Dkt. #347-5, at pp. 25, 50-52, 66-68, and 114-

115]..

Hilton ‘966 is prior art to the ‘012 Patent. [Dkt. #360-2, p. 7]. Although particularly addressed to attaching a sun umbrella to a baby stroller, Hilton ‘966 teaches that its snap-fit connector is broadly useful for connecting items “for instance in relation to push chairs, other nursery equipment, vehicle seals, items of luggage, strapping, medical and recreational uses.” [Dkt. #320-15, at 1:8-10]. Hilton ‘966 further establishes use of snap-fit connectors in applications in which a simple, cost-effective method of fastening, *i.e.*, connecting and releasing two parts, is needed.

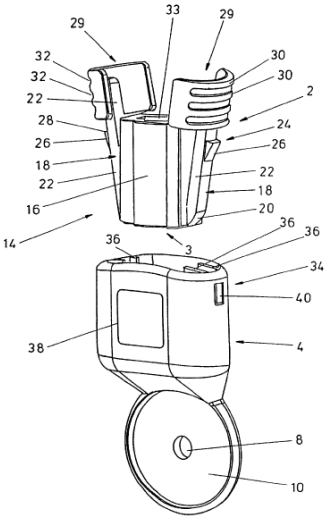
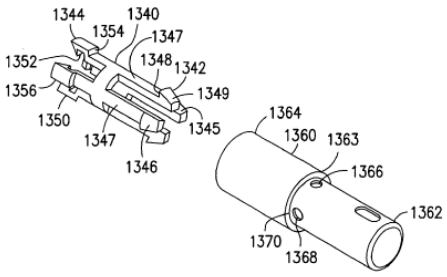


FIG. 1

As shown in Figure 1 of Hilton ‘966 (right), there is a clip (2, top) and a hollow portion (4, bottom). [Dkt. #320-15]. When the clip is inserted into the cup, two snap-fit beams (“arms,” 18) displace inward such that wedges 24 on each side of the clip engage with apertures 40 on the hollow portion. [Dkt. #320-15, 9:50-10:3]. To disengage the clip, the user pushes inward on the gripper portions 29, which causes the snap-fit beams to displace inward and the wedges 24 to disengage from the apertures 40, thus releasing the clip. [Dkt. #320-15, at 10:10-19].

U.S. Patent No. 6,501,990 ("Sundberg '990") is prior art to the '012 Patent. [Dkt. #360-2, p. 12]. The reference discloses a snap-fit connector used in a cardiac pacemaker lead. [Dkt. #320-17]. Sundberg '990 demonstrates the wide potential of snap-fit connector configurations.



As shown in the excerpt of Figure 10 (right), Sundberg '990 discloses a snap-fit connection between a sleeve 1340 and outer terminal ring 1360. [Dkt. #320-11, at ¶58]. The sleeve includes four cantilever hooks 1346 that deflect inward, towards the axis of the lead, to engage with the outer terminal ring 1360. [Dkt. #320-17, at 11:37-52, 12:38-40; Dkt. #320-11, at ¶58]. The outer terminal ring 1360 includes four cutouts 1368 with mating surface 1370, which locks against the mating surface 1348 of the cantilever hooks 1346. [Dkt. #320-17, at 12:5-20, 12:40-46; Dkt. #320-11, at ¶58].

IV. Objections to Validity R&R

The Validity R&R errs in several fundamental respects. In particular, the Validity R&R:

- Misunderstands the true problem facing the inventors at the time of the invention
- Misconstrues Defendants' arguments regarding the relevant prior art;

and

- Misapprehends the teaching of the relevant prior art.

Any one of these errors is sufficient for this Court to either modify the Validity R&R or resubmit the issues to the Special Master with instructions.

A. The Validity R&R Misunderstands the Problem Facing the Inventors at the Time of the Invention

The Validity R&R finds that the problem facing the inventors of the '012 Patent "was coming up with a simple and cost-effective way to mount a toner supply container in a copy machine that (1) would be easy to install and remove from a copy machine from the standpoint of the user, (2) would reliably seal toner within the container when outside the copy machine, and (3) would discharge the right amount of toner at the right time when installed in the copy machine." [Dkt. #370, p. 89]. While accurate, the statement is wholly unilluminating—the prior art also solved this exact problem, but (as Canon has characterized it) not in a way that was "as simple and as cost-effective" as the '012 Patent's invention.[2] [Dkt. #360-2, p. 4].

[2] The Validity R&R's statements to the effect that it is irrelevant to a §103 analysis that the prior art also solved this problem is both incorrect and misapprehends Defendants' arguments. Such prior art provides the universe of base references for the obviousness analysis and the drawbacks of that prior art in solving the same problem provide the inspiration for the nature of art the inventor would search for secondary references.

Indeed, the invention of the '012 Patent is—at best for Canon—an obvious improvement only to the first element identified by its expert—a simple and cost-effective way to mount a toner supply container in a copy machine that would be easy to install and remove from a copy machine from the standpoint of the user. It is not surprising, then, that the '012 Patent's Summary of the Invention repeatedly sets forth the objects of the invention as providing a simple structure for toner bottles to be either locked with, or released from, the EIS. [Dkt. # 320-4, 2:60-3:21].

In ignoring the '012 Patent's singular focus upon a simple and cost-effective structure to lock/release the prior art toner bottle that overcame deficiencies in the prior art, the Validity R&R misstates the problem facing the inventors and, as a direct result, wholly misapplies the analysis of what constitutes analogous prior art.

B. The Validity R&R's Misapprehends The Defendants' Arguments Regarding The Prior Art

The Validity R&R's findings regarding the prior art relied upon by Defendants boil down to the same point: that the secondary references are not in the toner bottle field. The test for analogous art, however, requires only that a reference be "'reasonably pertinent' to the problem that the inventor was trying to solve." *Wyers*, 616 F.3d at 1238; *see also* MPEP 2141.01(a) (2014) (citing *In re*

Bigio, 381 F.3d 1320, 1325 (Fed. Cir. 2004)). And the Supreme Court has made clear that "[w]hen a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, ***either in the same field or a different one***." *KSR*, 550 U.S. at 417 (emphasis added). In ascertaining whether prior art is analogous, art that addresses any need or problem ***known in the field of endeavor at the time of invention*** would be pertinent. *Id.* at 420.

Here, Defendants' secondary references are more than reasonably pertinent—they are directed precisely to (i) the drawbacks of the prior art identified in the '012 Patent's Field of the Invention and Related Art—improper engagement and unnecessarily complicated connecting structures—and (ii) the purposes repeatedly identified in the '012 Patent's Summary of the Invention (and restated as the improvement over prior art in the '012 Patent in the Validity R&R, [Dkt. #370, p. 91])—a simple structure for locking and releasing the toner bottle with the EIS. The Validity R&R, however, ignores the identified drawbacks and stated purpose of the invention of the '012 Patent to find the cited snap-fit prior art is not analogous.[3] [Dkt. #370, p. 89-90].

[3] Indeed, it appears that the Validity R&R wholly misapprehends Defendants' analysis, mischaracterizing it as "impermissible hindsight." It is well-settled that a Court analyzing obviousness must take care not to engage in "hindsight recreation" of the subject patent from the prior art. *Al–Site Corp. v. VSI International, Inc.*, 174 F.3d 1308, 1325 (Fed. Cir. 1999). *Accord In re*

Looking around his workshop, the *Winslow* inventor would see the prior art toner bottles of Yoshiki '079 and Matsuoka '806, *i.e.*, the primary references, which the inventor would recognize as providing a way to mount a toner supply container in a copy machine that (1) would be easy to install and remove from a copy machine from the standpoint of the user, (2) would reliably seal toner within the container when outside the copy machine, and (3) would discharge the right amount of toner at the right time when installed in the copy machine, but also recognize that the prior art had drawbacks.[4] In particular, the *Winslow* inventor would be dissatisfied with the primary references because Yoshiki '079 required a separate drive mechanism, [Dkt. #347-3, at 82:2-84:3], and Matsuoka '806, while having the drive mechanism engaged with the sealing mechanism, was too complicated and subject to alignment issues, [Dkt. #347-3, at 100:7-22, 102:19-103:2, 103:16-104:8]. This approach to defining the problem faced by the inventor

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Cyclobenzaprine Hydrochloride Extended–Release Capsule Patent Litigation, 676 F.3d 1063, 1073 (Fed. Cir. 2012); *Ortho–McNeil Pharm., Inc. v. Mylan Labs., Inc.*, 520 F.3d 1358, 1364 (Fed. Cir. 2008). Here, however, the clearly identified drawbacks of the prior art and stated purposes of the invention demonstrate that Defendants are following the *KSR* framework, not engaging in impermissible hindsight.

[4] The Validity R&R ignores *KSR* in finding that the lack of expert testimony regarding the Hei art cited in the '012 Patent is fatal to Defendants' reliance upon this art. *KSR* and its progeny in the Federal Circuit recognize that the legal determination of obviousness may include recourse to logic, judgment, and common sense, in lieu of expert testimony. *Wyers*, 616 F.3d at 1238.

of the '012 Patent is exactly the approach taken in *Winslow* and *KSR*, and confirmed by *Eisai*.

The *Winslow* inventor would also know from Matsuoka '806 that a toner bottle could be detachably mounted with an EIS through a snap-fit connection and that the toner bottle could be rotated through a rotational force exerted upon the bottle's removable sealing mechanism. The *Winslow* inventor's workshop walls would also reveal prior art disclosing simpler and more cost effective snap-fit connectors, including Hilton '966 and Sundberg '990.

Given this, at a minimum, genuine issues of material fact exist regarding whether the snap-fit prior art is analogous, under the broad standard imposed by KSR, at a minimum requiring the Validity R&R to be resubmitted to the Special Master.[5]

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[5] Where, as here, there is dueling evidentiary expert testimony, it is the role of the jury to resolve the conflict. *See Micro Chem, Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1392 (Fed. Cir. 2003); *see also, St. Clair Intellectual Prop. Consultants, Inc. v. Sony Corp.*, CA No. 01-557-JJF, 2003 U.S. Dist., LEXIS 3543, *1-*2 (D. Del. Feb. 21, 2003) (concluding that there were genuine issues of material fact regarding obviousness where the issue of validity was reduced to conflicting expert testimony); *Perfection Spring & Stamping Corp. v. Exacto Spring Corp.*, No. 95 C 7470, 1998 U.S. Dist. LEXIS 3817, at *14 (N.D. Ill. Mar. 25, 1998) (denying summary judgment based on the evidentiary conflict presented by the opposing testimony of Plaintiff's and Defendant's experts on this point); *Real v. Bunn-O-Matic Corp.*, 119 F. Supp. 2d 807, 811 (N.D. Ill. 2000) (denying summary judgment where conflicting expert opinion on the question of enablement presented an issue for the trier of fact); Here, the

C. The Validity R&R Misconstrues The Prior Art And *KSR*.

The Validity R&R also states three additional reasons supporting its recommendation that a judgment of no-invalidity be issued: (i) the prior art combinations relied upon by Defendants are still missing the "displacing force receiving portion" limitation of Claim 24, (ii) Defendants' arguments regarding the substitution of the clip of Hilton '966 for the collet chuck of Yoshiki '079 are insufficient as a matter of law, and (iii) Yoshiki '079 "teaches away" from the claimed limitation. Rather than analyze each of these issues, the Validity R&R simply adopts Canon's arguments in toto.

1. The Prior Art Combinations Disclose The Displacing Force Receiving Portion Limitation Of Claim 24.

The Validity R&R finds that the prior art combinations relied upon by Defendants are still missing the "displacing force receiving portion" limitation of Claim 24, simply adopting Canon's arguments as its findings. [Dkt. #370, p. 93]. The Validity R&R ignores, however, that each of Hilton '966 and Sundberg '990 clearly disclose a displacing force receiving portion. With respect to Hilton '966, the Validity R&R is correct that, as construed by this Court, the "engaging portion" must be "provided at a free end of the supporting portion," and Hilton '966's

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Validity R&R improperly usurped the jury's role in resolving the conflicting factual opinions.

wedge 24 is not at a free end of the arm 18. However, Defendants established in their responsive brief that an engaging portion "provided at a free end of the supporting portion" is disclosed by Sundberg '990 and by element 443 of Matsuoka '806. Further, Defendant's expert explained that engagement portion 328 shown in Fig. 11 of Matsuoka '806 is the equivalent of an engaging portion including a locking portion. [Dkt. #320-9, p. 91]. Thus, the prior art combinations do, contrary to the Validity R&R's naked conclusion, disclose the displacing force receiving portion limitation of Claim 24.

The Validity R&R's failure to recognize this point requires its reversal.

2. The Validity R&R's Errs In Adopting The Remaining Arguments Of Canon.

As an initial matter, the Validity R&R's finding that the rationale put forth by Defendants for substituting the clip of Hilton '966 for the collet chuck of Yoshiki '079 insufficient as a matter of law misapprehend the arguments and relevant precedent.

As explained earlier, a court is no longer required to inquire into the state of mind of the inventor to see if that particular inventor would have been motivated to combine references. Rather, the courts are to look to see whether there is any aspect of the claimed invention that would lead a person of ordinary skill to search

the cited prior art. Under the correct analysis, any need or problem ***known in the field of endeavor at the time of invention and addressed by the patent*** can provide a reason for combining the elements in the manner claimed. *KSR*, at 420 (emphasis added).

Here, it is clear that the drawbacks of the prior art identified in the '012 Patent provide just such a reason for combining Yoshiki '079 and Hilton '966.

Similarly, Canon's argument that Yoshiki '079 teaches away from the invention of the '012 Patent—raised for the first time in its reply brief—is without merit. Yoshiki '079 does not criticize or even allude to toner bottles that are rotated through their sealing member. Rather, Yoshiki '079 provides a solution for toner bottles rotated through alternative means and in which the bottle rotates relative to the cap. Importantly, Yoshiki '079 also discloses that the cap may be rotated. [Dkt. #320-13, 6:24-30]. Further, Defendants' other base reference—Matsuoka '806—shows the functional equivalent of the scrapers of Yoshiki '079 not being fixed on the cap. *See, e.g.*, [Dkt. #320-16, FIG 8(b) and 8:29-40]. Thus, when viewed in light of Matsuoka '806, at a minimum a genuine issue of material fact exists regarding whether Yoshiki '079 sufficiently teaches away from the invention of the '012 Patent to overcome the obvious combinations asserted by Defendants.

CONCLUSION

Based upon the foregoing, this Court should either modify the Validity R&R or resubmit it with instructions to the Special Master to correct the above-identified errors.

October 16, 2015

Respectfully submitted,

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General Plastic Industrial Co., Ltd. and
Color Imaging, Inc.

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
ATLANTA DIVISION

CANON INC., Plaintiff, v. COLOR IMAGING, INC. and GENERAL PLASTIC INDUSTRIAL CO., LTD., Defendants.	)	CIVIL ACTION NO.: 1:11-cv-03855-AT-JSA

CERTIFICATE OF SERVICE

I hereby certify that on October 16, 2015, I caused a copy of the within and foregoing DEFENDANTS' OBJECTIONS AND MOTION TO MODIFY SPECIAL MASTER'S REPORT AND RECOMMENDATIONS: PLAINTIFF CANON'S MOTION FOR SUMMARY JUDGMENT OF NO INVALIDITY OF U.S. PATENT NO. 7,646,012 to be electronically filed with the Clerk of Court using the CM/ECF system which will automatically send e-mail notification of such filing to all counsel of record in this action.

/s/ Bryan G. Harrison

Bryan G. Harrison